

# NASA TECH BRIEF



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## Test and Inspection for Process Control of Monolithic Circuits

In the preparation and production of monolithic circuits, an effort was made to provide quality assurance procedures for the mass production of high reliability integrated circuits at a reasonable cost. Many of the controls suggested would be too stringent for engineering model shop work or for a small quantity prototype order, but these same controls provide a basis for a homogeneous process in moderate or mass production quantities.

A report has been prepared detailing the test and inspection procedures, which covers the following areas:

- Configuration Control
- Basic Fundamentals of Quality Control
- Control Charts
- Wafer Process Evaluation
- Process Evaluation
- Evaluation Score System
- Diffusion Evaluation

- Wafer Scribing
- Bonding Operation
- Test Controls

Copies of the report, *Test and Inspection for Process Control of Monolithic Circuits*, by Edward Spangenberg, et al, Westinghouse Electric Corporation, February 25, 1967, are available from:

Technology Utilization Officer  
Marshall Space Flight Center  
Huntsville, Alabama 35812  
Reference: B67-10507

### Patent status:

No patent action is contemplated by NASA.

Source: E. Spangenberg  
of Westinghouse Electric Corporation  
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Category 01